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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,089	12/27/2006	Tommaso Di Giacomo	4235.438	4343
28410 7590 12/29/2008 BERENATO, WHITE & STAVISH, LLC 6550 ROCK SPRING DRIVE SUITE 240 BETHESDA, MD 20817				
EXAMINER				
ALTUN, NURI B				
ART UNIT		PAPER NUMBER		
3657				
MAIL DATE		DELIVERY MODE		
12/29/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/551,089

Applicant(s)

DI GIACOMO ET AL.

Examiner

NURI ALTUN

Art Unit

3657

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4-16 and 22-26 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1, 4-16 and 22-26 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 28 September 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Amendment received on September 11, 2008 has been acknowledged. Claims 2, 3 and 17-21 have been cancelled.

Drawings

1. The drawings are objected to because **Figure 8 shows “two different parts numbered 75”**. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: **Figures 7,8 and 9, reference number 69 is not mentioned**. Corrected

drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities:

Character 15 is used to describe "an arm" in the specification and a "drive member and a flexible belt" in claims.

Character 18 is used to describe "end portion" on page 4, line 10; and "opposite portion" on page 5, line 5 in the specification.

Character 29 is used to describe "annular cavity" on page 5, line 17; "close cavity" on page 6, line 3 in the specification; and an "annular chamber" in claims.

"8" should be deleted on page 8, line 16 in the specification because Figure 8 does not show character "56".

Character 60 is used to describe "hinge pin" on page 9, line 2; and "oscillation-damping bushes" on page 9, line 16 in the specification.

Character 58 is used to describe "a hinge-and-cam actuating assembly" in the specification; an "actuating means," and a "mechanical drive" in claims.

Appropriate correction is required.

Claim Objections

4. Characters used in claims are confusing since they designate different elements. For example, character "22" is used to designate "actuating means," "mechanical drive," and "cam actuating means."

Appropriate correction is required.

5. Same identification is used for two different elements. Applicants are required to differentiate names of hinge pin (60) and hinge pin (67).

6. Line 3 of claim 4 recites 'said actuator (47; 81)'. 'Actuator' is not used previously in the claims.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims **1, 4-16 and 22-26** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the phrase "in particular" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-8 and 22, 23, 25 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by **Temma et al. (20020183149)**.

As per claim 1, Temma et al. teach a drive assembly for driving a rotary member (21); the assembly being characterized by comprising

a movable supporting member (53);

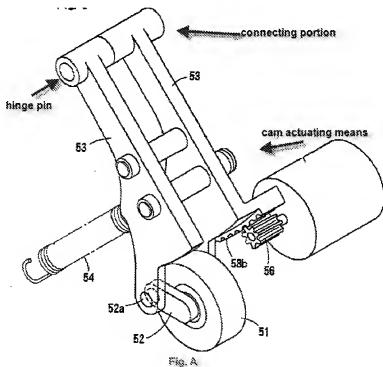
a drive wheel (51) fitted idly to said movable supporting member;

elastic means (54) for moving said movable supporting member, so that said drive wheel angularly engages said rotary member (21) and a drive member (15), powered by the combustion engine, to drive the rotary member (see Figure 3);

and further comprising actuating means (55) which can be activated to exert a force in opposition to that exerted by said elastic means (54), to detach said drive wheel from at least one of said rotary member and said drive member, wherein said actuating means comprise an electric motor (55) is reversible such that, when said elastic means exert a force, to push said drive wheel against said rotary member and said drive

member, which is greater than the travel resistance of said actuating means when maintained in a disabled rest condition, said force overcomes the resistance of the electrical rotary motor (see paragraph 0064; the drive wheel is capable of being detached from rotary member or drive member).

As per claims 4-8, Temma et al. teach a mechanical drive (56 and 53b) interposed between said actuating means and said movable supporting member (53) (Claim 4), movable supporting member comprises a connecting portion, opposite the drive wheel, connected to mechanical drive, to move along a circular trajectory (see Fig. A) (Claim 5), and said mechanical drive comprises a gear drive (56) interposed between the electric rotary motor and said movable supporting member (claim 6), and mechanical drive comprises cam actuating means (see Fig. A) (Claim 7) interposed between said gear drive and said connecting portion (see Figs. A) (Claim 8).



As per claim 22, Temma et al. teach said movable supporting member (53) comprises two contoured portions.

As per claim 23, Temma et al. teach said contoured portions extend on opposite sides of a central plane of symmetry of the drive wheel (51), which plane is perpendicular to the axis of rotation of said drive wheel (See Fig. 4).

As per claim 25, Temma et al. teach said contoured portions contact, and are connected integrally to, each other (See Fig. 4).

As per claim 26, Temma et al. teach contoured portions define at least one end fork having respective arms; each arm having a respective integral cylindrical projection forming part of a hinge pin (52b) coaxial with a relative axis (see Fig. 4), and to which the drive wheel (51) is mounted to rotate about the relative axis (paragraph 0063, lines 19-21).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Temma et al. (20020183149)**, in view of **Floehr (3,157,132)**.

Temma et al. teach said connecting portion is a hollow tubular portion having an axis of symmetry parallel to the axis of rotation of said drive wheel (51) (see Fig. A); and in that said cam actuating means comprise a hinge pin engaging said hollow tubular

portion in rotary manner about said axis of symmetry, and said actuating means rotating said hinge pin about said hinge axis.

However Temma et al. don't explicitly disclose a hinge pin hinged to a fixed frame to rotate about a hinge axis parallel to and eccentric with respect to the axis of symmetry.

Floehr teaches a pivot assembly having a hinge pin (48) hinged to a fixed frame to rotate about a hinge axis parallel to and eccentric with respect to the axis of symmetry (see Fig. 11).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the assembly of Temma et al. to include the hinge pin orientation as taught by Floehr in order to provide alignment to the pin with other parts.

Claims **10, 11, 15 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Temma et al. (20020183149)**, in view of **Floehr (3,157,132)**, as applied to claim 9 above, further in view of **Bakker (5,967,919)**.

As per claims 10 and 11, Temma et al. and Floehr combination teaches all the structural elements of the claimed invention, as mentioned in claim 9 above, but doesn't explicitly disclose said elastic means comprise a torsion spring housed in tubular portion and having one end fixed angularly to said hinge pin and the opposite end fixed angularly to the tubular connecting portion, and said tubular connecting portion defines an annular chamber coaxial with said axis of symmetry; said torsion spring being a wire spring housed in said annular chamber and coaxial with said axis of symmetry.

Bakker teaches a belt tensioner having said elastic means comprise a torsion spring (26) housed in tubular portion (36) and having one end fixed angularly to hinge pin (94) and the opposite end fixed angularly to the tubular connecting portion (36) (see col.4, lines 8-16 and see Fig. 2) (Claim 10), and said tubular connecting portion defines an annular chamber (38) coaxial with said axis of symmetry; said torsion spring (26) being a wire spring housed in said annular chamber and coaxial with said axis of symmetry (see Figs. 1 and 2) (Claim 11).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the spring arrangement of Bakker et al. in place of the spring arrangement of Temma et al. in order to bias the wheel on drive member for benefit of a compact mechanism.

As per claims 15 and 16, Temma et al. and Floehr combination teaches all the structural elements of the claimed invention, as mentioned in claim 9 above, but doesn't explicitly disclose frame being connected integrally to a fixed body by a single through screw extending coaxially with said hinge axis, and said frame has a recess bounded by a cylindrical end surface coaxial with said axis of symmetry; said connecting portion being housed removably in said recess; and said hinge pin being connected in rotary manner to a hinge pin coaxial with the hinge axis and integral with a supporting plate of said frame.

Bakker teaches frame (28) is connected integrally to a fixed body (24) by a single through screw (76) extending coaxially with said hinge axis (see Fig. 1) (Claim 15), and said frame has a recess (38) bounded by a cylindrical end surface coaxial with said axis

of symmetry; said connecting portion being housed removably in said recess; and the hinge pin (70) being connected in rotary manner to a hinge pin (34) coaxial with the hinge axis and integral with a supporting plate (32) of said frame (see Fig. 1) (Claim 16).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the assembly of Temma et al. and Floehr to include the screw as taught by Bakker in order to maximize compactness.

Claim **24** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Temma et al. (20020183149)**.

Temma et al. don't explicitly disclose said contoured portions being made of molded plastic material. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the contoured portions to be made of molded plastic material to provide proper strength and weight characteristics. Also note *MPEP Section 2144.07* states that the selection of a known material based on its suitability for its intended use supports a prima facie obviousness determination.

Allowable Subject Matter

Claims **12-14** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In claim 12, the prior art of record fails to teach or suggest the hinge pin is fitted integrally with a radial toothed portion of said gear drive. Claims 13 and 14 depend from claim 12, and would be allowable due to their dependency.

Response to Arguments

Applicant's arguments with respect to claims 1, 4-16 and 22-26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The reference Kitamura et al. (6,953,407) teach a belt transmission apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NURI ALTUN whose telephone number is (571)270-5807. The examiner can normally be reached on Mon-Fri 7:30 - 5:00 with first Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272 7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bradley T King/
Primary Examiner, Art Unit 3657

NBA